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MADRAS RECORD OFFICE.

Government of Madras.

Public works **DEPARTMENT.**

G.O. No. 141-142.	42.	Press / Mis.
Dated	10- 1-	1843.

Not to be folded or roughly handled

Proceedings of the Madras Government, Public Works Department, 10th January 1873.

No. 141. Read the following letter from H. D. E. DALRYMPLE, Esq., Master Attendant, Administrative Department, to the Officiating Chief Secretary to Government, Fort St. George, dated Madras, 20th November 1872, No. 6,507:—

I HAVE the honour to acknowledge receipt of the papers specified in the margin and the Proceedings of Government, dated 22nd October 1872, No. 2,482, and respectfully to request permission, before this correspondence is finally closed, to offer a few remarks on the subject of the lights for the Southern Coasts of India, and to point out that, in consequence of this order, a new allotment* of the different lights will be necessary.

Letter from Superintending Engineer, 8th Division, to Secretary to Government, Public Works Department, dated 6th August 1872, No. 2,191.

From Master Attendant, Administrative Department, to Chief Secretary to Government, Marine Department, dated 19th August 1872, No. 4,645.

* With reference to my letter to Government, dated 11th September 1872, No. 4,992.

2. I beg leave to remind Government that a light on Capo Comorin was first proposed by Captain Biden,† the Master Attendant of Madras, many years ago; that it was afterwards recommended by Mr. Franklin, Superintendent of Marine, and consequently a fourth order dioptric revolving light was procured from England in 1870.

† Not by Mr. Franklin, as erroneously stated by me in a former letter.

3. After I was placed in charge of the office of Superintendent of Marine I took up the question of lights for the most southern points of the Peninsula of India, consulted numbers of Captains of ships and steamers, studied the most approved works on the subject of the lighting of Coasts for the safety of shipping, and came to the conclusion that, instead of having only one light on Cape Comorin, two lights were needed to meet the requirements of the advanced stage of steam navigation round the Coasts of India—the principal one to be on Cape Comorin and the secondary one on Point Cadiapatam. (*Vide* my letters to Government noted in the margin.)

No. 2,267, of 13th April 1871.
,, 3,972, of 6th July ,,
,, 5,151, of 4th Sept. ,,
,, 6,946, of 29th Nov. ,,
,, 7,026, of 4th Dec. ,,

4. It will be observed that my predecessors, Captain Biden and Mr. Franklin, officers of great experience of the navigation of the Eastern Seas, gave the preference to Cape Comorin as the best site when only one light was contemplated. This decision proves that, if two lights had been allowed, the principal one would have been placed on Cape Comorin, and this is corroborated by Mr. Franklin's letter to the Under Secretary of State for India, dated 3rd May 1872.

5. The fact has now been clearly established that the gentlemen who differed with me regarding the sight for a light-house on Point Cadiapatam had been misinformed regarding the Kotah Rock, and my description of it has been found to be, after a full discussion on the subject, perfectly correct.

6. The letter to Government from Colonel Roberts, R. E., based on his own experience and observation, is a most able and convincing one on the subject; yet, as Government have decided on placing a first class light on Point Cadiapatam, I strongly recommend that not only a light-house be built (according to Colonel Roberts' recommendation) on Cape Comorin adapted for a first class light—which it must have some day,—but that a first class revolving light instead of one of the fourth order be allowed,* and this will finally settle the question and afford perfect satisfaction to all concerned.

* Alan Stephenson, S B., F.R.S.E, M.S.C.E., Engineer to the Board of Northern Light-houses, thus writes :—

"Views of economy in the first cost of a light-house should never be permitted to interfere with placing it in the best possible position."

7. In that valuable work on the means of illuminating Coasts and Harbours, etc., by Colonel A. Fraser, C.B., R. E., published in 1867, treating on the admirable system of lighting the Coasts of France, he thus writes, "But the French plan, by which *all* the salient points of the Coast are marked by lights of the *first order*, and by which no vessel in the ordinary state of the atmosphere can approach the Coast without seeing one or more lights, for their ranges all intersect each other, is sufficiently perfect." Again he writes, "It is thus impossible to approach the French Coast in the ordinary state of the atmosphere without having a light in view, and its character and that of the neighbouring ones defines the position completely."

8. It is on this principle I contend that the chief headlands on the Southern Coasts of India should be lighted.

9. As I have stated in former letters, a first class light-house on Cape Comorin will be a grand landmark by day, and at night, by having a first class light there as well as on Point Cadiapatam, cross bearings can be obtained anywhere between the two lights, and the Captains of the Steam Liners will be relieved of all anxiety during their night runs and will be enabled to keep their time.

Rear Admiral Bedford thus writes :—

"Assuming a light to be on Minicoy (which seems very desirable), then a light in the vicinity of Crocodile Rock would occupy nearly a middle position, and, while a good landfall light is required for ships coming in from the westward, a light on Cape Comorin is EQUALLY wanted for ships coming from Ceylon, and in the same degree for coasters these lights would relatively prove beneficial."

Again he writes, "I may repeat that other considerations besides the guarding of Crocodile Rock must be looked at in deciding which of the two lights should be placed near the danger."

10. As I may, without presumption, claim to have established the principle of two lights for these most southern headlands of India, and have worked hard to carry this point for the benefit of the trade of the East, I trust that Government will be pleased to accede to this my last request on the subject.

11 I now propose the lights to be thus arranged :—

The revolving fourth class dioptric light apparatus now in store to be set up at Point Calimere,† and thus a revolving light will be placed between the fixed lights of Negapatam and Paumben.

† Recommended by Mr. Robertson, Harbour Engineer.

Proceedings of the Madras Government, Public Works Department,
10th January 1873.

On Cape Comorin a first class revolving dioptric light, and on Point Cadiapatam* a first class bright white fixed dioptric light. By this arrangement a revolving light will be placed between two fixed lights, namely, those of Tuticorin and Point Cadiapatam.

I also propose for the point at Quilon, which, according to Horsburgh,† is dangerous to approach under twelve or thirteen fathoms, a third class red fixed light, and this, as an intermediate light between those of Cadiapatam and Alleppy,‡ will be sufficient to complete the chain of lights round the Southern Coasts of India.

* As already agreed on.

NOTE.—In 1861 proportion of lights along the shores of England and France was as follows:
England, one for 14 miles.
France, one for 12·3 ,,
Since then the number of English lights has been greatly increased. Distance between Cape Comorin and Point Cadiapatam, sixteen miles.

†"Quilon bank, etc., etc., very uneven and dangerous of approach."
Again—
"Abreast the point there are sudden overfalls from 9 to 4, 3, and 2 fathoms rocky bottom."

‡NOTE.—At Alleppy there is a beautiful second class bright revolving light.

TRANSFERRED to the Department of Public Works.

(Signed) W. HUDLESTON,
Chief Secretary.

No. 142. ORDER THEREON, 10th January 1873, No. 72.

CIVIL WORKS, No. 3.

HIS Excellency the Governor in Council agrees with Mr. Dalrymple that the most satisfactory solution of the question of lights for Cape Comorin and Point Cadiapatam will be that finally proposed by him in this letter, namely, a first class revolving dioptric light on the former and a first class bright white fixed dioptric light on the latter, and he authorizes their provision and the planning of the light-houses accordingly.

2. There appears to be no objection to the utilization of the fourth class dioptric light apparatus now in store at Point Calimere. But the Governor in Council is not prepared at present to move in the matter of providing a light at Quilon.

(True Extract.)

Colonel, R. E.,
Secretary to Government.

To the Master Attendant, Administrative Department.
,, District Engineer, Tinnevelly.
,, Marine Department.
,, Inspecting Engineer.

Exd. A. S. Rodgers.

Administrative Department.

Madras. 5
Marine Office
20th November 1872.

No. 6507.

From

H. D. E. Dalrymple Esqre
Master Attendant
Administrative Department
Madras.

To

The Honourable W. Hudleston.
Officiating Chief Secretary to Govt.
Marine Department
Fort Saint George.

Sir

I have the honour to acknowledge receipt of the papers specified in the margin, and the Proceedings of Government dated 22d October 1872, No. 2482, and respectfully to request permission, before this correspondence is finally closed, to offer a few remarks on the subject of the Lights for the Southern Coasts

Letter from Superintending Engineer 8th Division to Secretary to Government P. W. D. dated 6th August 1872, No. 279.
From Master Attendant Administrative Department to Chief Secretary to Government Marine Department dated 19th August 1872 No. 4645.

Coasts of India, and to point out that in consequence of this order a new allotment* of the different Lights will be necessary.

* with reference to my letter to Government dated 11th September 1872, No. 4992.

2. I beg leave to remind Government that a light on Cape Comorin was first proposed by Captain Biden,° the Master Attendant of Madras, many years ago, — that it was afterwards recommended by Mr. Franklin, Superintendent of Marine, and consequently a 4th Order Dioptric revolving light was procured from England in 1870.

° not by Mr. Franklin as erroneously stated by me in a former letter.

3. After I was placed in charge of the Office of Superintendent of Marine, I took up the question of lights for the most Southern points of the Peninsula of India — consulted numbers of

of Captains of Ships and Steamers — studied the most approved works on the subject of the lighting of Coasts for the safety of Shipping, and came to the conclusion that instead of having only one light on Cape Comorin, two lights were needed to meet the requirements of the advanced stage of Steam Navigation round the Coasts of India — the principal one to be on Cape Comorin, and the secondary one on Point Calimere, vide my letters to Government noted in the margin.

No. 2267 of 13th April 1871.
No. 3972 of 6th July 1871.
No. 5151 of 4th Septr. 1871.
No. 6946 of 29th Novr. 1871.
No. 7026 of 4th Decr. 1871.

4. It will be observed that my Predecessors Captain Biden and Mr. Franklin, Officers of great experience of the navigation of the Eastern Seas — gave the preference to Cape Comorin as the best site, when only one light was contemplated:— this decision proves that, if two lights had

had been allowed, the principal one would have been placed on Cape Comorin, and this is corroborated by Mr. Franklin's letter to the Under Secretary of State for India, dated 3d May 1872.

5. The fact has now been clearly established that the Gentlemen, who differed with me regarding the site for a Light House on Point Cadiapatam, had been misinformed regarding the Kotah rock, and my description of it has been found to be, after a full discussion on the subject, perfectly correct.

6. The letter to Government from Colonel Roberts R.E. based on his own experience and observation, is a most able and convincing one on the subject— yet as Government have decided on placing a first class Light on Point Cadiapatam, I strongly recommend that not only a Light House be built (according to Colonel Roberts' recommendation) on Cape Comorin adapted for a first class light— which it must have some day— but that a first class revolving light instead of one of the 4th Order be allowed, and this will finally settle the question, and afford perfect satisfaction to all concerned.

7. In that valuable work on the means of illuminating coasts and harbours &c by Colonel A. Fraser C.B. R.E., published in 1867, treating on the admirable system of lighting the Coasts of France, he thus writes. "But the French plan "by which all the salient points of "the Coast are marked by lights of "the first order, and by which no "vessel in the ordinary state of the "atmosphere, can approach the Coast "without seeing one or more lights, for

* Alan Stephenson F.R.S.E. M.I.C.E. Engineer to the Board of Northern Light houses thus writes.
"Views of economy in the first cost of a "Light house should never be permit-"-ted to interfere with placing it in the "best possible position".

for their ranges all intersect each other, is sufficiently perfect." Again he writes "It is thus impossible to "approach the French Coast in the "ordinary state of the atmosphere "without having a light in view, "and its character and that of the "neighbouring ones defines the posi- "tion completely."

8. It is on this principle I contend that the chief Headlands on the Southern Coasts of India should be lighted.

9. As I have stated in for- -mer letters a first-class Light House on Cape Comorin will be a grand land mark by day, and at night by having a first class light there as well as on Point Calia- -gatam, cross bearings

"looked at in deciding which of "the two lights should be placed "near the danger."

bearings can be ob- -tained any where between the two lights, and the Cap- -tains of the Steam Liners will be relieved of all anxiety during their night runs, and will be enabled to keep their time.

10. As I may without pre- -sumption claim to have established the principle of two lights for these most Southern headlands of India, and have worked hard to carry this point for the benefit of the trade of the East, I trust that Government will be pleased to accede to this my last request in the subject.

11. I now propose the Lights to be thus arranged.

The revolving 4th Class Dioptric light apparatus now in store to be set up at Point Calimere, and thus a revolving Light will be placed between the fixed Lights of Negapatam and Paumben.

Recommended by Mr. Robertson, Harbour Engineer.

On Cape Comorin a 1st Class revolving Dioptric Light, and on Point-

Point Cadiapatam a 1st class bright as already agreed on. white fixed Dioptric Light. — By this arrangement a Revolving Light will be placed between two fixed lights, Viz.t those of Tuticorin and Point Cadiapatam.

I also propose for the Point at Dnilon, which according to Horsburgh,× is danger-ous to approach un-der 12 or 13 fathoms, a 3rd. Class red fixed light, and this, as an intermediate Light between those of Cadiapatam and Alipee,≠ will be sufficient to complete the chain of lights round the Southern Coasts of India.

Note.

In 1861 proportion of lights along the shores of England and France was as follows.

England 1 for 14 miles
France ... 1 for 12.3 —"—

Since then the number of English lights has been greatly increased. Distance between Cape Comorin and Point Cadiapatam 16 miles.

× "Dnilon bank 3 & 4 very "uneven and dangerous "of approach"

Again

"Abreast the point there are "sudden overfalls from 9 to "4 - 3 and 2 fathoms rocky "bottom."

≠ Note.

At Alipee there is a beautiful 2d Class bright revolving light

---

India.

13

I have the honour to be
Sir
Your most obedient Servant

W. D. Eldalrymple
Master Attendant
Administrative Department.

No. 72 P. W. Deptt 15th

Proceedings of the Madras Government

Read the following

From,

The Master Attendant
tho' the Chief Secy. to Govt.

} (M. E. No. 6507 of 20th Nov/72)

His Excellency
the Governor in Council
agrees with Mr. Dalrymple
that the most satisfactory
solution of the question
of lights for Cape Com-
orin and Point Cadia-
patnam will be that final-
-ly proposed by him
in this letter, viz. a 1st
Class revolving Dioptric
Light

As long as the light at Cadiapatam
is a 1st class - I do not wish
the controversy as to the class
of light at Cape Comorin to be
continued. Mr. Dalrymple has
worked very hard in this question

Mr. Sec

Transmitted to the Master Attendant
for information
By Order &c
(Signed) J. H. Garstin
Chief Secy to Govt.

Fort St. George
Dated 30th Nov/1872

No. 6507

Registered

Read 4th Dec/1872

Recommending the adoption
of Lights for the Cape
Comorin Point Calimere
and Cadiapatam Reefs
and recommending the
Light House with a
Fixed Light also
erected on Cape
Comorin

Copy forwarded to the Chief Secy to Govt. Fort St. George for information with reference to his letter No. 1972 dated 20th Nov/1872

By Order &c
(Signed) J. H. Garstin
Master Attendant

Fort St. George
Dated 4th Dec/1872

No. 1141

Registered

Light on the former, and a 1st Class bright white fixed Dioptric Light on the latter – And he authorizes their provision, and the planning of the Lighthouses accordingly.

There appears to be no objection to the utilization of the 4th Class Dioptric Light apparatus now in store, at Point Cahuiere –

But the Governor in Council is not prepared at present to move in the matter of providing a light at Limbon which is not a place of con-

His Opinion meets with consideration superbat home – & he may think have his way. RL

It is only a question of first cost – as he have ordered the light House to be constructed to carry a 1st. class light eventually if necessary.

A light at the Oyster Rock at Lillieberry would be very valuable for the coasting trade

J. Ds

Send this Com.

40
5–

5 T. The Master Attendant (Admiy. Deptt.)
5 – Dt Engineer Londonderry
11 " Marine Deptt
3 " Inspecting Engineer of Ports
Dt Engineer Illadmn

Dupd 14/1/73
To 3/3/73

sequence in itself, provided as dangerous to shipping.

Gillis

1/6

Chebog 3

Govt. of {1872} Madras.

PUBLIC WORKS.

To The Master Attendant
Administration Dept.

Dated

Recd. Encl.

G. O. 10 Jany 3 No. 72.

Nos. 141 & 142

Copy of Light Vessel exhibited at Cape Comorin & Points Tadiapatnam and Calimere. Cleaning & Numbers in the Mizen and decking Screws present in the matter of proving a light at Quilon.